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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,702	06/04/2002	Akio Matsumoto	KNI-163-A	3987

7590 06/02/2004

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EXAMINER

FIORILLA, CHRISTOPHER A

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,702

Applicant(s)

MATSUMOTO ET AL.

Examiner

Christopher A. Fiorilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 12-17, 19, 21-42 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 18, 20 and 43 is/are rejected.
- 7) ☒ Claim(s) 4-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's election with traverse of Group I in Paper dated 3/8/04 is acknowledged. The traversal is on the ground(s) that:

Initially, applicant respectfully submits that while various claims may be directed to specific applications/uses of the invention, all of the claims are nonetheless directed towards the same general inventive concept, i.e., provision of a wet-type compacting method which overcomes the several problems and disadvantages of the conventional methods as discussed in the background of the present application, and which result in compacts that can be used as high technology mobile body devices, protective members, etc. having superior qualities.

In this regard the very related nature of the several claims is strongly reflected by the overlapping and identical nature of the limitations used in the claims, e.g., the method of Group I uses the mixture of Group II, the compact of Group III is the product of the method of Group I; the protective member of Group IV is also the product of the method of Group I; etc. Further, given the completely overlapping nature of Groups I and III as method of producing compact and compact produced, applicant respectfully submits that these Groups have unity under the PCT rules.

Still further applicant respectfully submits that given the general inventive concept common to all of the Groups, as well as the overlapping nature of all the claims, the Examiner could concurrently examine all claims in the application or at least the claims of multiple overlapping Groups (e.g., Groups I-IV) "without serious burden" and should do so pursuant to MPEP '803. For example, the Examiner already indicates his preliminary determination that the

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Claims of Groups I and II are anticipated by US Patent 5,530,081 to Nover such that there would be no serious burden to examine these Groups together.

Based on the foregoing it is respectfully requested that the restriction requirement be reconsidered and withdrawn.

Although applicant traverses the restriction, applicant again hereby provisionally elects (pursuant to the requirement of 37 CFR 1.143) Invention Group I as defined by the Examiner, drawn to method claims 1-13, 18-21 and 43.

Comments Regarding US Patent 5,530,081 to Nover:

Applicant has considered the Examiner's comment regarding anticipation of the claims of Groups I and II by the Nover patent, and with regard thereto applicant respectfully submits that the method disclosed by Nover is very distinct from the claimed invention of Groups I and II because Nover's compacting system is an organic solvent system. Particularly, Nover uses a mixture of silicon carbide powder, polycarbosilane and organic solvent wherein the polycarbosilane is soluble in the organic solvent. On the other hand, the presently claimed invention (e.g., claim 1) involves two steps: firstly coating high polymer organic substance on the surface of a carbide powder, and then compacting the powder. If the coating system according to the invention is an organic solvent system, the compacting system is a water system (according to claim 1, "high polymer organic substance is substantially insoluble in the solvent").

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2. This is not found persuasive because the arguments with respect to the Nover reference are not persuasive. The special technical feature (see e.g. claim 1) is not limited to a non-organic solvent as argued. Further, Nover does not require that the polymer therein be soluble in the solvent. Instead, Nover discloses that the polymer may be swellable in the solvent rather than soluble. Since, applicant argues that all groups contain the same special technical feature, it is reasoned that no unity exists because the special technical feature does not make a contribution over the art of record. Further, a thorough search for each of the groups would include search areas unique to each group and thus serious burden would exist in examining all groups.

The requirement is still deemed proper and is therefore made FINAL.

3. Further, note that claims 12,13,19 and 20 were listed in the original restriction requirement as method claims. These claims are clearly drawn to a compact as recited in group III. Thus, these claims have been regrouped with group III.

4. Claims 12-17,19,21-42 and 44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper dated 3/8/04.

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5. Claims 4-11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-11 have not been further treated on the merits.

6. Claim 20 is objected to because of the following informalities:

In claim 20, line 3, the word "Dispersing" should be changed to - - dispersing - -.

Appropriate correction is required.

7. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-3, the phrase "wet-type" is indefinite. The addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nover (5,530,081).

See e.g. col. 3, lines 46-64.

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10. Claim 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohnsorg (4,233,256). See Example 1.

11. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Prochazka (4,004,934).

Prochazka teaches dispersing coated carbide powder (e.g. col. 5, lines 2-3) in water (e.g. col. 5, line 48) and compacting the body (i.e. slip-casting – col. 5, line 47).

12. Claim 18,20 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai et al. (5,145,812).

Arai discloses a mixture of powder, solvent and polymer precursor (e.g. cols. 7-8) which acts as a binder/sintering aid (e.g. col. 2, line 38, col 7, last line). Arai also discloses the mixture may be slip cast (e.g. col. 10, line 10) and sintered under the claimed conditions (e.g. col. 10). Arai discloses that any carbide powder may be used (e.g. col. 10, line 58). The claimed particle sizes are encompassed by Examples 11 and 12.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Fiorilla whose telephone number is (571) 272-1187. The examiner can normally be reached on M-F, 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher A. Fiorilla
Primary Examiner
Art Unit 1731

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